AMENDMENTS TO THE SPECIFICATION

This listing of claims will replace all prior versions, and listings, of claims in the application. All amendments are made without prejudice or disclaimer.

Listing of Claims

1.(Currently Amended) An isolated cross-reactive antibody or a fragment thereof, which specifically inhibits or blocks the mammalian Toll- like receptor 2 (TLR2)-mediated immune cell activation by specifically binding to the C- terminal portion of the extracellular domains of at least human and murine TLR2 , wherein the antibody or fragment thereof specifically binds through the variable regions of the heavy and light chains, wherein the heavy chain variable region comprises a complementarity determining region 1 (CDR1) comprising the amino acid sequence Gly-Phe-Thr-Phe-Thr-Thr-Tyr-Gly (residues 58-64 of SEQ ID NO:1), a CDR2 region comprising the amino acid sequence Ile-Tyr-Pro-Arg-Asp-Gly-Ser-Thr (residues 83-90 of SEQ ID NO:1) and a CDR3 region comprising the amino acid sequence Ala-Arg-Leu-Thr-Gly-Gly-Thr-Phe-Leu-Asp-Tyr (residues 129-139 of SEQ ID NO:1), and wherein the light chain variable region comprises a CDR1 region comprising the amino acid sequence Glu-Ser-Val-Glu-Tyr-Tyr-Gly-Thr-Ser-Leu (residues 46-56 of SEQ ID NO:2), a CDR2 region comprising the amino acid sequence Gly-Ala-Ser (residues 74-76 of SEQ ID NO:2) and a CDR3 region comprising the amino acid sequence Gln-Gln-Ser-Arg-Lys-Leu-Pro-Trp-Thr (residues 113-121 of SEQ ID NO:2).

2. (Previously Presented) The antibody or antibody fragment of claim 1, wherein the antibody is selected from a polyclonal antibody, a monoclonal antibody, a humanized antibody, a chimeric antibody, or a synthetic antibody.

3. (Previously Presented) The antibody or antibody fragment of claim 1 or 2, wherein the antibody specifically binds through the variable regions of the heavy[[-]] chain comprising the amino acid sequence as depicted in SEQ ID NO:6 and the light chain comprising the amino acid sequence as depicted in SEQ ID NO: 7.

4. (Previously Presented) The antibody of claim 1, wherein said antibody is linked to a pharmaceutical agent, to a detectable agent, or both.

5. (Previously Presented) An isolated nucleic acid coding for the variable regions of the heavy chain of the antibody of claim 3, the light chain of the antibody of claim 3, or both.

6. (Previously Presented) An isolated nucleic acid which comprises the sequence of SEQ ID NO: 1, SEQ ID NO: 2, or both.

7. (Previously Presented) An isolated nucleic acid which comprises one or more nucleic acids selected from Nos. 172-201, 244-294, 385-417 of SEQ ID NO: 1, or of nucleic acids No. 130-174, 220-240 and/or 337-363 of SEQ ID NO : 2.

8. (Previously Presented) The isolated nucleic acid of one or more of claims 5-7, said isolated nucleic acid further comprising a nucleic acid encoding one or more regulatory sequences operably linked thereto.

9. (Previously Presented) A vector, which comprises the nucleic acid sequence of claim 5.

10. (Previously Presented) The vector of claim 9, which is an expression vector and which further comprises one or more regulatory sequences operably linked to said nucleic acid.

11. (Previously Presented) The vector of claim 9 or 10, which is a plasmid or a retroviral vector.

12. (Previously Presented) An isolated host cell, which has been transformed with the vector of claim 9.

13. (Previously Presented) The isolated host cell of claim 12, which is a eukaryotic cell.

14. (Previously Presented) The isolated host cell of claim 13, wherein the cell is selected from the group consisting of a mammalian cell, plant cell, yeast cell or an insect cell.

15. (Previously Presented) The isolated host cell of claim 14, wherein the cell is a mammalian cell which is selected from the group consisting of a CHO, COS, HeLa, 293T, HEH or BHK cell.

16. (Previously Presented) The isolated host cell of claim 12, wherein the cell is a prokaryotic cell.

17. (Previously Presented) The isolated host cell of claim 16, wherein the cell is *E. coli* or *Bacillus subtilis*.

18. (Previously Presented) A pharmaceutical composition comprising the antibody or fragment thereof of claim 1, a nucleic acid encoding the variable regions of the heavy and/or light chains of said antibody or a vector comprising said nucleic acid and a pharmaceutically acceptable carrier.

19. (Previously Presented) The pharmaceutical composition of claim 18, which further contains one or more pharmaceutically active ingredients.

20. (Previously Presented) The pharmaceutical composition of claim 18 or 19, wherein the one or more pharmaceutically active ingredients are selected from the group consisting of antibiotic agents, antiinflammatory agents, and agents which block a pattern recognition receptor.

21. (Previously Presented) The pharmaceutical composition of claim 20, wherein the agent pattern recognition receptor is selected from the group consisting of Toll-like Receptor 3

(TLR3), Toll-like Receptor 4 (TLR4), Toll-like Receptor 4 (TLR5), Toll-like Receptor 7 (TLR7), Toll-like Receptor 8 (TLR8) and Toll-like Receptor 9 (TLR9).

22. (Previously Presented) A hybridoma which produces a monoclonal antibody according to claim 2.

23. (Previously Presented) A method of preventing and/or treating a TLR2 mediated process in a mammal, comprising administering the antibody of claim 1 or a fragment thereof, a nucleic acid encoding the variable regions of the heavy chain of said antibody, the light chain of said antibody, or both, or a vector comprising said nucleic acid or a composition comprising any thereof and a pharmaceutically acceptable carrier to said mammal in an effective amount to prevent and/or treat said TLR2-mediated process.

24. (Previously Presented) The method of claim 23, wherein the individual dose administered to a mammal, preferably a human, is between 1 mg to 100 mg/kg body weight.

25. (Previously Presented) The method of claim 24, wherein the individual dose is administered as a single dose to the mammal.

26. (Previously Presented) The method of claim 25, wherein the individual dose is administered repeatedly to the mammal.

27. (Previously Presented) The method of claim 24, wherein the dose is between 10 to 60 mg/kg body weight.

28. ((Previously Presented)) The method of claim 24, wherein the dose is between 20 to 40 mg/kg body weight.

29. (Cancelled)

30. (Previously Presented) The method of claim 23, wherein the TLR2 mediated process is selected from rheumatoid or vascular arthritis, inflammatory bowel disease.

31. (Cancelled)

32. (Previously Presented) The antibody or fragment thereof of claim 1 wherein the antibody comprises:

a heavy chain variable region having the amino acid sequence of SEQ ID NO:1;

a light chain variable region having the amino acid sequence of SEQ ID NO:2; or

both.

33. (Currently Amended) The antibody fragment of claim 1 comprising complementarity determining regions (CDRs) of the heavy chain variable domain, wherein the CDR1 region comprises the amino acid sequence Gly-Phe-Thr-Phe-Thr-Thr-Tyr-Gly (residues 58-64 of SEQ

ID NO:1), the CDR2 region comprises the amino acid sequence Ile-Tyr-Pro-Arg-Asp-Gly-Ser-Thr (residues 83-90 of SEQ ID NO:1) and the CDR3 region comprises the amino acid sequence Ala-Arg-Leu-Thr-Gly-Gly-Thr-Phe-Leu-Asp-Tyr (residues 129-139 of SEQ ID NO:1), and/or the complementarity determining regions (CDRs) of the light chain variable domain wherein the CDR1 region comprises the amino acid sequence Glu-Ser-Val-Glu-Tyr-Tyr-Gly-Thr-Ser-Leu (residues 46-56 of SEQ ID NO:2), the CDR2 region comprises the amino acid sequence Gly-Ala-Ser (residues 74-76 of SEQ ID NO:2) and the CDR3 region comprises the amino acid sequence Gln-Gln-Ser-Arg-Lys-Leu-Pro-Trp-Thr (residues 113-121 of SEQ ID NO:2).

34. (Previously Presented) The antibody fragment of claim 1 wherein the antibody fragment is selected from the group consisting of an Fab, F(ab')2 or an Fv antibody fragment.

35. (Previously Presented) An antibody encoded by the isolated nucleic acid of claim 6.